

**IN THE UNITED STATES PATENT & TRADEMARK OFFICE**

In re Application of:	§	Confirmation No.: 2316
Jay R. Walton, et al.	§	
	§	Group Art Unit: 2647
Serial No.: 10/693,532	§	
	§	Examiner: TSEGAYE, Saba
Filed: 23 October 2003	§	
	§	
For: RANDOM ACCESS FOR	§	Attorney Dkt. No. 020573
WIRELESS MULTIPLE ACCESS	§	
COMMUNICATION SYSTEMS	§	

In accordance with 37 C.F.R. § 1.8, I certify that this Correspondence is being submitted to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313 via the USPTO's EFS-Web Electronic Filing System on **7 NOVEMBER 2011**.

/jameshunt Vancey Jr. 53809/

James Hunt Vancey, Jr., USPTO Reg. No. 53,809

**INTERVIEW SUMMARY &  
INFORMATION DISCLOSURE STATEMENT SUBMISSION**

Applicant thanks the Examiner for the telephone interview that took place on 4 November 2011. During the telephone interview, the Examiner and the undersigned discussed Applicant's recent response (filed 31 August 2011), the most recent Office Action, and the differences between the pending claims and the cited references as outlined in Applicant's recent response. As mentioned in the interview, Applicant files an IDS so that materials known to Applicant are provided to the Examiner. If the Examiner does not believe this summary to be sufficient, Applicant requests the Examiner to contact the undersigned so that this interview summary can be supplemented.

Applicant submits the enclosed new IDS form in compliance with 37 C.F.R. § 1.56. This Application is related to a number of co-pending cases and Applicant submits items from these related matters to ensure that the Examiner receives items known to Applicant. It is believed that having these references reviewed now is prudent given the stage of prosecution and so that the USPTO can review additional references uncovered in related cases.

Applicant acknowledges that a large number of references have been cited during prosecution of the Application. Applicant cites the new items and all of the cited items out of an abundance of caution to ensure full compliance with 37 C.F.R. § 1.56. Applicant follows MPEP guidance and USPTO recommendations that states, “[w]hen in doubt, it is desirable and safest to submit information.” See MPEP § 2004 (Consideration Number 10) (citing *LaBounty Mfg., Inc. v. U.S. ITC*, 958 F.2d 1066, 1067 (Fed. Cir. 1992)). Applicant also follows the guidance in MPEP § 2004 that “[e]ven though the attorney, agent, or applicant doesn’t consider it necessarily material, someone else may see it different and embarrassing questions can be avoided.” *Id.* Applicant follows these USPTO recommendations by providing the new IDS submission.

The submission of the information shall not be deemed an admission that the information is necessarily material to the patentability of this Application. In addition, the submission of this information shall not be deemed that a search has been conducted or that the cited information is prior art. See 37 C.F.R. § 1.97(g)-(h).

Applicant authorizes charging of all necessary fees to review this new IDS submission, and the Commissioner is authorized to charge any fees deemed due to Dep. Acct. 17-0026 for acceptance of this submission.

Respectfully submitted,  
QUALCOMM, INC.  
/jameshuntanceyjr53809/  
James Hunt “Hunter” Yancey, Jr.  
USPTO Reg. No. 53,809

Qualcomm Patent Group  
5775 Morehouse Drive  
San Diego, CA 92121  
P: (858) 845-7534  
E: hunter@qualcomm.com  
**DATE: 7 NOVEMBER 2011**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				<b>Application Number</b>	10/693,532
				<b>Filing Date</b>	2003-10-23
				<b>First Named Inventor</b>	WALTON; J. Rodney
				<b>Art Unit</b>	2467
				<b>Examiner Name</b>	TSEGAYE; Saba
<b>Sheet</b>	<b>1</b>	<b>of</b>	<b>7</b>	<b>Attorney Docket No:</b> 020573	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2(a)</sup> (known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	001	US5479447	12-26-1995	CHOW; Peter S. et al.	
	002	US5790550	08-04-1998	PEETERS; Johan et al.	
	003	US5822374	10-13-1998	LEVIN; Howard E.	
	004	US6072779	06-06-2000	TZANNES; Marcos et al.	
	005	US6122247	09-19-2000	LEVIN; Howard E. et al.	
	006	US6205410	03-20-2001	CAI; Lujing	
	007	US6222888	04-24-2001	KAO; Chiihsin et al.	
	008	US6330277	12-11-2001	GELBLUM; Ehud Alexander et al.	
	009	US6510184	01-21-2003	OKAMURA; Yusaku	
	010	US6631121	10-07-2003	YOON; Sung-Hoon	
	011	US6744811	06-01-2004	KANTSCHUK; Amir	
	012	US6768727	07-27-2004	SOUROUR; Essam et al.	
	013	US6798738	09-28-2004	DO; Sang-Hyun et al.	
	014	US6859503	02-22-2005	PAUTLER; Joseph J. et al.	
	015	US6891858	05-10-2005	MAHESH; Harihara et al.	
	016	US6959171	10-25-2005	TSIEN; Chih C. et al.	
	017	US6980601	12-27-2005	JONES; David Charles	
	018	US6985534	01-10-2006	MEISTER; Wolfgang	
	019	US7003044	02-21-2006	SUBRAMANIAN; Chandrasekarapuram A. et al.	
	020	US7127009	10-24-2006	BERTHET; Antoine et al.	

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		<b>Application Number</b>	10/693,532	
		<b>Filing Date</b>	2003-10-23	
		<b>First Named Inventor</b>	WALTON; J. Rodney	
		<b>Art Unit</b>	2467	
		<b>Examiner Name</b>	TSEGAYE; Saba	
<b>Sheet</b>	<b>2</b>	<b>of</b>	<b>7</b>	<b>Attorney Docket No:</b> 020573

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2(a)</sup> (known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	021	US7130362	10-31-2006	GIRARDEAU; James et al.	
	022	US7137047	11-14-2006	MITLIN; Vlad et al.	
	023	US7274734	09-25-2007	TSATSANIS; Michail	
	024	US7333556	02-19-2008	MALTSEV; Alexander A. et al.	
	025	US7356004	04-08-2008	YANO; Takashi et al.	
	026	US7379492	05-27-2008	HWANG; In Tae	
	027	US7508748	03-24-2009	KADOUS; Tamer	
	028	US7599443	10-06-2009	IONESCU; Dumitru M. et al.	
	029	US7986742	07-26-2011	KETCHUM; John W. et al.	
	030	US20020044610	04-18-2002	JONES; David	
	031	US20030003863	01-02-2003	THIELECKE; Jorn et al.	
	032	US20030039317	02-27-2003	TAYLOR; Douglas Hamilton et al.	
	033	US20030185311	10-02-2003	KIM; Yong-Woon	
	034	US20040076224	04-22-2004	ONGGOSANUSI; Eko N. et al.	
	035	US20040151108	08-05-2004	BLASCO CLARET; Jorge Vicente et al.	
	036	US20040151122	08-05-2004	LAU; Kin Nang et al.	
	037	US20040184398	09-23-2004	WALTON; Jay Rod et al.	
	038	US20050047515	03-03-2005	WALTON; J. Rodney et al.	
	039	US20050135284	06-23-2005	NANDA; Sanjiv et al.	

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>		
		<b>Application Number</b>	10/693,532	
		<b>Filing Date</b>	2003-10-23	
		<b>First Named Inventor</b>	WALTON; J. Rodney	
		<b>Art Unit</b>	2467	
		<b>Examiner Name</b>	TSEGAYE; Saba	
<b>Sheet</b>	<b>3</b>	<b>of</b>	<b>7</b>	<b>Attorney Docket No:</b> 020573

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2a</sup> (known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	040	US20050135295	06-23-2005	WALTON; Jay Rodney et al.	
	041	US20050135318	06-23-2005	WALTON; Jay Rodney et al.	
	042	US20050147177	07-07-2005	SEO; Dong-Youn et al.	
	043	US20050185575	08-25-2005	HANSEN; Christopher J. et al.	
	044	US20050220211	10-06-2005	SHIM; Dong-Hee et al.	
	045	US20050276343	12-15-2005	JONES; David Charles	
	046	US20060018395	01-26-2006	TZANNES; Marcos C.	
	047	US20060067417	03-30-2006	PARK; Chang-Soon et al.	
	048	US20060159120	07-20-2006	KIM; Joonsuk	
	049	US20060209894	09-21-2006	TZANNES; Marcos et al.	
	050	US20060209937	09-21-2006	TANAKA; Yoshinori et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> Number-Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	051	CN1469662	01-21-2004	LG ELECTRONICS INC.	<input checked="" type="checkbox"/>
	052	CN1537371	10-13-2004	MATSUSHITA ELECTRIC IND CO LTD.	<input checked="" type="checkbox"/>
	053	EP1137217	09-26-2001	ERICSSON TELEFON AB L M [SE]	<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds of Documents of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<i>Complete If Known</i>		
		<b>Application Number</b>	10/693,532	
		<b>Filing Date</b>	2003-10-23	
		<b>First Named Inventor</b>	WALTON; J. Rodney	
		<b>Art Unit</b>	2467	
		<b>Examiner Name</b>	TSEGAYE; Saba	
<b>Sheet</b>	<b>4</b>	<b>of</b>	<b>7</b>	<b>Attorney Docket No:</b> 020573

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T e
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
	054	EP1416688A1	05-06-2004	MOTOROLA INC [US]		<input type="checkbox"/>
	055	EP1447934A1	08-18-2004	INST EURECOM G I E [FR]		<input type="checkbox"/>
	056	JP06003956	01-14-1994	SEIKO EPSON CORP.		<input checked="" type="checkbox"/>
	057	JP2000078105	03-14-2000	NEC CORP.		<input checked="" type="checkbox"/>
	058	JP2002232943A	08-16-2002	SONY CORP.		<input checked="" type="checkbox"/>
	059	JP2002504283	02-05-2002	AWARE INC.		<input checked="" type="checkbox"/>
	060	JP2003198442	07-11-2003	HITACHI LTD., et al.		<input checked="" type="checkbox"/>
	061	JP2004266586	09-24-2004	HITACHI LTD.		<input checked="" type="checkbox"/>
	062	JP2004297172	10-21-2004	SHARP CORP.		<input checked="" type="checkbox"/>
	063	JP2004535694	11-25-2004	QUALCOMM INCORPORATED.		<input checked="" type="checkbox"/>
	064	JP2005519520	06-30-2005	QUALCOMM INCORPORATED.		<input checked="" type="checkbox"/>
	065	JP2006504372	02-02-2006	QUALCOMM INCORPORATED.		<input checked="" type="checkbox"/>
	066	RU2139633	10-10-1999	SAMSUNG ELECTRONICS CO., LTD.		<input checked="" type="checkbox"/>
	067	RU2197781C2	01-27-2003	OLIVETTI TELEMEDIA SPA [IT]		<input checked="" type="checkbox"/>
	068	TW545006B	08-01-2003	WORLDSPACE MAN CORP [US]		<input checked="" type="checkbox"/>
	069	TW583842B	04-11-2004	KONINKL PHILIPS ELECTRONICS NV [NL]		<input checked="" type="checkbox"/>
	070	TWI230525	04-01-2005	QUALCOMM INC [US]		<input checked="" type="checkbox"/>
	071	WO03010994A1	02-06-2003	NEXO [FR], et al.		<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<i>Complete If Known</i>		
		<b>Application Number</b>	10/693,532	
		<b>Filing Date</b>	2003-10-23	
		<b>First Named Inventor</b>	WALTON; J. Rodney	
		<b>Art Unit</b>	2467	
		<b>Examiner Name</b>	TSEGAYE; Saba	
<b>Sheet</b>	5	<b>of</b>	7	<b>Attorney Docket No:</b> 020573

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
		Country Code <sup>3</sup> Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	072	WO03075479	09-12-2003	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	073	WO04038986	05-06-2004	QUALCOMM INCORPORATED, US.		<input type="checkbox"/>
	074	WO05041515	05-06-2005	QUALCOMM INC.		<input type="checkbox"/>
	075	WO05043855	05-12-2005	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	076	WO2004038985A2	05-06-2004	QUALCOMM INC [US]		<input type="checkbox"/>
	077	WO2005046113A2	05-19-2005	ATHEROS COMM INC [US], et al.		<input type="checkbox"/>
	078	WO86007223	12-04-1986	TELEBIT CORPORATION.		<input type="checkbox"/>
	079	WO9307684A1	04-15-1993	SIXTEL SPA [IT]		<input type="checkbox"/>
	080	WO9507578	03-16-1995	QUALCOMM INCORPORATED [US]		<input type="checkbox"/>
	081	WO9857472	12-17-1998	AWARE INC [US]		<input type="checkbox"/>
	082	WO99014878	03-25-1999	QUALCOMM INCORPORATED.		<input type="checkbox"/>

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T2
	083	GRUNHEID, R. et al., "Adaptive Modulation and Multiple Access for the OFDM Transmission Technique," Wireless Personal Communications 13: 5/13/2000, 2000 Kluwer Academic Publishers, pp. 4-13, XP000894156.				<input type="checkbox"/>
	084	LE GOFF, S. ET AL: "Turbo-codes and high spectral efficiency modulation," IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS, 1994. ICC '94,				<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds of Documents of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		<i>Complete if Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Application Number</b>	10/693,532
		<b>Filing Date</b>	2003-10-23
		<b>First Named Inventor</b>	WALTON; J. Rodney
		<b>Art Unit</b>	2467
		<b>Examiner Name</b>	TSEGAYE; Saba
<b>Sheet</b>	<b>6</b>	<b>of</b>	<b>7</b>
			<b>Attorney Docket No:</b> 020573

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T2
		SUPERCOMM/ICC '94, CONFERENCE RECORD, 'SERVING HUMANITY THROUGH COMMUNICATIONS.' pp. 645-649, vol. 2, 1-5 MAY 1994, XP010126658, doi: 10.1109/ICC.1994.368804.	
	085	Singapore Search Report - SG20104266-1 - Hungary Intellectual Patent Office - 2011-09-08 (050452SGD2).	<input type="checkbox"/>
	086	SONG, Bong-Gee et al., "Prefilter design using the singular value decomposition for MIMO equalization," 1996 Conference Record of the Thirtieth Asilomar Conference on SIGNALS, SYSTEMS AND COMPUTERS, vol. 1, pp. 34-38, 3-6 November 1996, XP010231388, DOI: 10.1109/ACSSC.1996.600812, page 35, column 2, paragraph 4 through page 36, column 1.	<input type="checkbox"/>
	087	WYGLINSKI, Alexander. "Physical Layer Loading Algorithms for Indoor Wireless Multicarrier Systems," Thesis Paper, McGill University, Montreal, Canada, November 2004, page 109.	<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

\*EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. † Applicant's unique citation designation number (optional). ‡ See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. § Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3). ¶ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. †† Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. ‡‡ Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				<i>Complete if Known</i> <b>Application Number</b> 10/693,532 <b>Filing Date</b> 2003-10-23 <b>First Named Inventor</b> WALTON; J. Rodney <b>Art Unit</b> 2467 <b>Examiner Name</b> TSEGAYE; Saba	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>					
<b>Sheet</b>	<b>7</b>	<b>of</b>	<b>7</b>	<b>Attorney Docket No:</b> 020573	

**CERTIFICATION STATEMENT**

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

- ☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

**OR**

- ☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

- ☐ See attached certification statement.
- ☒ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
- ☐ None

**SIGNATURE**

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/jameshuntancyejr53809/	Date (YYYY-MM-DD)	7 November 2011
Name/Print	James Hunt Yancey, Jr.	Registration Number	53809

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**